

Serial No. : 10/065,789
 Applicants : Ted W. Haan, Clinton R. Lupton,
 Michael J. Kasper and Jerry J. Bukoski
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REMARKS

The amendments and remarks presented herein are believed to be fully responsive to the recent Office Action.

Disposition of Claims.

Claims 1-82 are pending in the application and all are at issue.

Claim Rejections – 35 U.S.C. § 103.

Claims 1-82 were rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent 6,131,372 issued to Pruett. The rejection is traversed. To expedite prosecution, independent claims 1, 33, 41, 73, 81 and 82 are amended. Independent claims 21 and 61 remain as originally filed, except that the term “based” was deleted from claim 21 to provide consistency with claim 67. This amendment to claim 21 does not narrow the claims. The amendments are fully supported by the application as filed. Accordingly, no new matter is added. Reconsideration is requested.

The undersigned wishes to express his gratitude to Examiners Sharma and Matecki for the helpful and courteous interview that was conducted in person at the Patent Office on June 16, 2004. At the interview, the nature of the various disclosed embodiments of the invention were discussed. It was understood that the undersigned would amend claims 1, 33, 41, 73, 81 and 82 to recite the control of the release of product as a function of the product the sorter assembly is sorting. It was further understood that the undersigned would discuss, in this response, the meaning of the term “sorter time parameter” appearing in independent claims 21 and 61.

Addressing the later item, the term “sorter time parameter” is a term that is taught in the specification. Reference is made to paragraph 0025, wherein it is stated that:

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Algorithm 40 begins at 42 by determining a sorter time parameter. This is accomplished by determining an AVERAGE CARTON TIME at 44. The AVERAGE CARTON TIME is determined by measuring the time that a photo-eye P1, P2, or P3 is blocked to obtain a TOTAL CARTON TIME and dividing the TOTAL CARTON TIME by the number of cartons to arrive at the AVERAGE CARTON TIME. If the AVERAGE CARTON TIME is less than a minimum time, the AVERAGE CARTON TIME is set to the minimum. An AVERAGE SORTER TIME is obtained at 46 from a relationship to the AVERAGE CARTON TIME, as may be obtained from a formula, look-up table, or the like. The AVERAGE SORTER TIME is multiplied by the carton count at 48 to obtain a TOTAL SORTER TIME at 48.

Thus, many illustrative examples of a sorter time parameter are given in the specification. The respective claims specify the requirements of the claim term.

Turning now to the rejection of the claims as being unpatentable over Pruett, it is submitted that the combined teaching of the prior art fails to disclose, teach or suggest the claimed sortation system and method of sorting product. Pruett is directed to food packaging machinery (column 1, lines 5-11) and not to product sortation. Accordingly, it is submitted that there is no motivation in the art for the skilled artisan to consult Pruett for a solution to the problem uniquely solved by the invention defined in the rejected claims. Even if Pruett is consulted, important elements are missing.

For example, Pruett fails to disclose, teach or suggest a control monitoring a sorter assembly and controlling a supply line supplying product for the sorter including causing the at least one supply line to release product as a function of the product that the sorter assembly is sorting. These or similar words are set forth in claims 1-20, 33-60 and 73-82. The section of Pruett referred to in the Office Action discloses controls of the speed of a feed conveyor to provide a constant first queue of articles upstream of an article-metering device. It is submitted that the skilled artisan would not find the claimed invention obvious over Pruett.

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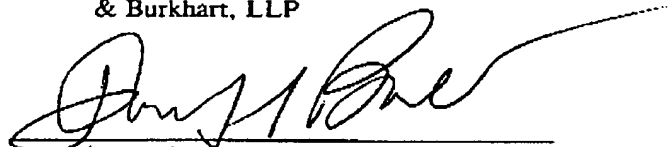
Pruett also fails to disclose, teach or suggest determining a sorter time parameter indicative of a rate of product being sorted by a sortation assembly and affecting operation of a slug-building assembly as a function of the sorter time parameter. These or similar words appear in claims 21-32 and 61-72. Other claim elements are also missing from Pruett. By way of example, Pruett fails to disclose, teach or suggest combining slug-
 portions into slugs of product as specified in claims 1-20, 41-60, 81 and 82. Nor does it disclose, teach or suggest receiving product on at least one conveying surface from an accumulation conveyor at a first substantially continuous speed to build slugs and discharging slugs of product from at least one conveying surface at a second speed that is substantially higher than the first speed, as specified in claims 33-40, 73-80 and 82. Accordingly, it is submitted that all of the claims at issue are patentably distinguishable over Pruett. Withdrawal of the rejection is requested.

Issuance of a Notice of Allowance is earnestly solicited. If Examiner Sharma has any questions or reservations, it is requested that Examiner Sharma call the undersigned attorney.

Respectfully submitted,

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